

Appl. No. 10/020,334
Amendment dated October 15, 2004
Reply to Office Action of July 15, 2004

Remarks/Arguments

Claims 1-30 are pending and stand rejected on varying grounds under §102(b) and 103(a).

Claims 5 and 17 are objected to because of informalities and have been amended accordingly.

Claims 1, 13, and 25 have been amended to further clarify the claimed subject matter. New claims 31-34 have been added. No new matter has been added by any of the amendments to the claims or the new claims. In view of the comments below, Applicant believes the rejections have been overcome and respectfully requests that the Examiner reconsider the present application including claims 1-33 and withdraw the rejections to / objections of claims 1-30.

a) Applicant wishes to express appreciation for the Examiner's time, consideration, and views provided to Applicant in a September 21, 2004 telephonic interview as well as the obvious additional thought and time extended to provide an interview summary. The interview concerned the final office action issued by the Examiner on July 15, 2004 and the manner in which Yamada (US 5438701) was being applied to the claimed invention. More specifically the interview focused on three discussion points that Applicant had submitted prior to the interview. As the Examiner noted, agreement was not reached, although Applicant was not necessarily anticipating that a complete agreement would be reached. The Examiner suggested filing an appeal or alternatively an RCE with claim amendments further clarifying the messaging receiver element of the independent claims. As discussed below and in view of the Examiner's

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interpretation of messaging receiver, Applicant seeks to traverse the rejections based on further distinguishing the first receiver from the paging receiver shown by Yamada.

b) Applicant notes with appreciation that the Examiner has withdrawn the objections to the specification and rejection of the claims under 35 U.S.C. §112 made in the earlier office action in view of the previously filed Amendment.

c) Claims 5 and 7 are objected to because of informalities. The Examiner has pointed out that "said duty cycle" as used in these claims should be "a duty cycle" to comply with antecedent basis norms. These claims have been accordingly amended and thus Applicants respectfully submit that this objection has been successfully traversed. Applicants thus request that the Examiner reconsider and withdraw this objection to these claims.

d) Claims 1, 8, 11, 13, 20, 23 and 25-26 stand rejected under 35 U.S.C. 102(b) as being anticipated by Yamada (U.S. Patent No. 5,438,701). Applicant has amended independent claims 1, 13, and 25 to further clarify the first receiver or receiving element of these claims.

Yamada shows a paging receiver 3 that operates with a paging system (col. 4, lines 15-20) to receive a page and responsive thereto power on (FIG. 2, S3-S5) a radio telephone 2, thereby apparently realizing some power savings for the radio telephone. Yamada exclusively shows or suggests the use of paging receivers and paging systems. Paging receiver architectures are exclusively of the superheterodyne, zero-IF, or (possibly) low-IF types [cf. Pager Application Handbook AN3B. Eindhoven, The Netherlands: Philips Semiconductors. March 1995, p. VII-3,

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copy enclosed]. As one of ordinary skill realizes these are not low power receivers, i.e. receivers having low power consumption. Of course these receivers and all others consume low power when the power is disconnected or turned off, an observation that paging systems rely on. Any significant reduction in power consumption is the result of the paging system. As is known by utilizing the paging receiver in a paging system with a corresponding paging protocol, where the paging receiver or major portions can be powered down a substantial percentage of time, i.e. the receiver has a low percentage duty cycle, the total power consumed by the paging receiver can be reduced. Applicant respectfully submits this does not show or suggest a receiver having low power consumption, i.e. low power architecture. Thus Applicant respectfully submits that the paging receiver of Yamada is not a receiver having low power consumption.

Applicant has amended claims 1, 13, and 25 to even further clarify this issue. The claims now include the phrase "when operated continuously" to further distinguish the first receiving element, i.e. a first receiver having low power consumption when operated continuously as variously claimed. Applicant respectfully submits that the paging receiver of Yamada clearly is not a receiver having low power consumption when operated continuously and thus Yamada does not show or suggest all features of amended claims 1, 13, or 25 or by virtue of respective dependency claims 2-12, 14-24, or 26-30. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 1, 8, 11, 13, 20, 23 and 25-26 under 35 U.S.C. 102(b) based on Yamada (U.S. Patent No. 5,438,701).

e) Claims 2-3, 9, 14-15, and 21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of applicant's admitted prior art. Note that each of these claims are

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dependent on one of claims 1, 13, or 25 and thus by virtue of this dependency should be allowable over Yamada in view of the discussions above. It is also noted that the list of low power receiver architectures of claim 2, or 14 (via analogous processes) is included in new claim 31.

With reference to claim 2, the Examiner maintains that "Yamada teaches that the first receiver is a low power receiver." Applicant respectfully submits that the Examiner is misconstruing the showings or suggestions of the reference, i.e. as noted above Yamada does not teach a low power receiver or a low power receiver architecture. Yamada teaches using a paging receiver and paging system to effect a receiver that consumes power according to a duty cycle, e.g. by powering down the receiver for a portion of the time, and thus a receiver that on average consumes less or low power. Applicant submits this is not a receiver that is a low power receiver as the Examiner alleges or a receiver having low power consumption.

The Examiner further notes correctly that "Yamada does not teach that the receiver is a super regenerative receiver, regenerative receiver, tuned radio frequency receiver, ultrasonic receiver, or passive receiver" as recited by claim 2, 14, and new claim 31. The Examiner then maintains that "Applicant discloses in background section, page 2 lines 6-9, of the application that regenerative and passive receivers are well known in the art for having very low power consumption." and concludes "It would have been obvious by one skilled in the art at the time of invention to combine the teachings of Yamada with the suggestions of prior art to included in Yamada a type of receiver based upon the needs of the receiver. In addition, admitted prior art suggests that regenerative and passive receivers provide a very low power alternative to other types of receivers."

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The Examiner has re-iterated a similar viewpoint in the summary of the telephonic interview conducted on September 21, 2004, where Applicant's representative argued that it was not appropriate to use the background statement since those statements, in context, teach away from using the disclosed low power receivers in this field. More specifically as stated on page 3 first paragraph of the Interview Summary, "the examiner does not consider the background to teach away from the claimed invention." The Examiner supports this position in the Interview Summary alleging (1) "background states that the prior art is marginal/unacceptable for some applications, but does not specify any application." (2) "The background states that low power receivers lack sophistication, but applicant's claims do not require sophistication. The low power paging receiver of Yamada does not require sophistication." And (3) "Page 14 lines 1-6 of applicant's specification reciting that duty cycle for the low power receiver of applicant's invention is used in traditional paging systems contradicts the argument that the background teaches away from using low power receivers in this field."

Applicant respectfully submits that any statements in the background section teach away from using known regenerative or passive receivers in a selective call or messaging receiver field. More specifically the paragraph in the background section that the Examiner has referred to recites:

"Current selective call receivers with more or less requisite processing capacities have demonstrated battery life from days for cellular receivers to 1-2 months for some messaging devices, which is insufficient. These receivers presently use a duty cycle comprising a periodic scheduled short on or wake cycle followed by a long off or sleep cycle to extend battery life to these levels. Even at the duty cycles being used the latency or delay associated with service availability is generally believed to be marginal for some

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applications and unacceptable in others. Very low power consumption receivers that are known such as regenerative or passive receivers do not have the sophistication, performance, or processing capabilities needed for most present day applications."

The context of this paragraph is the field of selective call receivers or messaging receivers and known art that may be relevant to the need for improved battery life together with generally required performance/processing capabilities.

Regarding the allegation (1) noted above the marginal/unacceptable applies to undue use of duty cycles (such as applied by Yamada). Regarding allegation (2) the background statement says the known very low power consumption receivers (regenerative and passive) lack sophistication, performance, or processing capabilities needed for most present day applications. It seems clear to Applicant given the context of the paragraph that the applications referred to in the background are applications of selective call receivers or messaging receivers. Again it is respectfully submitted the context of the statement is the field of selective call or messaging receivers and that the disclosed low power receivers have been viewed as unacceptable in this field. Applicant further disagrees with the Examiner's contention that Yamada's paging receiver does not require sophistication assuming arguendo that the Examiner is implying by this statement that the receiver is low performance, etc. Paging receivers are not simple unsophisticated low performance low capability receivers in Applicant's considered view.

Regarding allegation (3) the passage in the detailed specification that is referred to by the Examiner recites "To further reduce or lower power consumption the selective call communications unit or the low power receiver can take advantage of or operate according to a duty cycle including a down or sleep time period and an up or awake time period, where the

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down time period exceeds the up time period. This technique and variants of it are used in traditional paging and messaging systems." This section says that techniques that are employed by paging can be used with low power receivers for even additional improvement. Applicant is puzzled how these comments can be construed to contradict the argument that the background teaches away from using low power receivers in this field? In summary, in Applicants view the background clearly indicates that known low power receivers have been viewed as inappropriate for selective call receivers and applications thereof. Furthermore there is no suggestion in Yamada that would lead or motivate one of ordinary skill to look to any of the recited receiver architectures of claim 2, although Applicant is willing to concede the general need for battery life extending techniques.

Furthermore, based on Applicant's search these various receiver architectures have been known for a long period of time and in spite of motivations to increase battery life in selective call receivers or messaging receivers have not been employed. Various references are being provided by IDS and some background is provided here:

Edwin Armstrong patented the regenerative receiver on 6 October 1914, patent 1,113,149. Edwin Armstrong patented the superregenerative receiver on 25 July 1922, patent 1,424,065, and also published it in the August 1922 issue of *Proceedings of the IEEE*. Ultrasonic receivers appear to have been around at least as long as submarines have used sonar; however, the earliest reference to their use in communications that was found is the Zenith "Space Command" television remote control, invented by Dr. Robert Adler and sold in Zenith television sets beginning in 1956. There are several patents on this; with the earliest found being Adler's patent 2,817,025, issued 17 December 1957. Passive (e.g., crystal) receivers were the

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first type known, and all there was before Lee DeForest invented the amplifying Audion vacuum tube in 1906. There are numerous citations of passive receivers, but perhaps the earliest is in a patent by Guglielmo Marconi, 586,193, issued 13 July 1897. Thus in spite of a generally recognized need and long known availability of these receiver architectures no one has used them in for a selective call receiver or methods thereof as claimed.

Thus and for these additional reasons, Applicant respectfully submits that this rejection of claims 2 and 14 is not proper. Therefore Applicant respectfully requests that the Examiner withdraw this rejection of claims 2-3, 9, 14-15, and 21 under 35 U.S.C. 103(a) based on this combination of references.

f) Claims 4-6, 16-18 and 27-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of applicant's admitted prior art and Siwiak (U.S. Patent No. 5,239,306). Note that each of these claims are dependent on one of claims 1, 13, or 25 and thus by virtue of this dependency should be allowable over Yamada and Applicant's background statements in view of the discussions above as well as Siwiak as that reference alone or together does not supply the missing teachings. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claims 4-6, 16-18 and 27-28 under 35 U.S.C. 103(a) based on Yamada in view of applicant's admitted prior art and Siwiak (U.S. Patent No. 5,239,306).

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g) Claims 7, 10, 12, 19, 22, 24 and 29-30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada and Ghisler (U.S. Patent No. 5,541,976). Note that each of these claims are dependent on one of claims 1, 13, or 25 and thus by virtue of this dependency should be allowable over Yamada in view of the discussions above as well as Ghisler as that reference alone or together does not supply the missing teachings. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claims 7, 10, 12, 19, 22, 24 and 29-30 under 35 U.S.C. 103(a) based on Yamada in view of Ghisler (U.S. Patent No. 5,541,976).

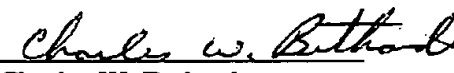
Accordingly, Applicant respectfully submits that the claims 1-30, as amended, and new claims 31-34 clearly and patentably distinguish over the cited references of record and as such are to be deemed allowable. Such allowance is hereby earnestly and respectfully solicited at an early date. If the Examiner has any suggestions or comments or questions, calls are welcomed at the phone number below.

Although it is not anticipated that any fees are due or payable other than those indicated on the Fee transmittal form, the Commissioner is hereby authorized to charge any fees that may be required to Deposit Account No. 50-1147.

Enclosures (2 pages)

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No. 5197 P. 2

**Pager
Applications Handbook
AN3B**

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Question and explanation hints

Prayer receiver design

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• **Compliant to various data coding standards.** The UKAS/ISO is accepted as a leading security standard, but as one-third of the world's data security standards, the company designed for the major PC/XT to IBM, the company makes the world's top models for their data systems.

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